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The Macdonald FARM Journal



BETTER FARMING DAY – JUNE 26

May, 1962

23, No. 5



Grain Corn in Quebec



THE MACDONALD LASSIE

Editorial

You Scratch my Back, . . . !

1. March 1st, 1962 — certain Montreal Dairies announce a price increase for home delivered milk of two cents per quart.
2. About ten days later, in the face of adverse reaction from consumers' groups and some government officials, rumours circulate that these same dairies are endeavouring to secure a higher farm price for fluid milk to justify a portion of the two cent price increase.
3. March 22nd, 1961 — Federal Government announces a dairy policy clearly designed to decrease the price disparity between milk sold for fluid purposes and that sold for processing purposes.
4. Public hearings announced into the question of whether or not retail minimum prices should be retained on bottled milk sold on the Montreal market.
5. April 9th, 1962 — Federal Government announces changes in dairy program which would have the effect of maintaining supports on surplus milk sold by fluid milk producers at 1961 levels. In doing so the Minister made it evident that the Government would not support the price of their surplus milk after April 30th, 1963. At the same time it was reported that the year of grace was mainly to give the Provinces of Ontario and Quebec time to set up marketing programs along the lines of the one in British Columbia (a form of price pooling).
6. Late April, rumour circulates that the Montreal Milk Producers-Suppliers' Marketing Board has signed agreements with a number of dairies for a farm price hike of at least 16 cents per cwt. Rumour indicates too that some dairies refuse to sign the agreement for the price hike, and further that the agreement has not been ratified by the Quebec Agricultural Marketing Board. Check with the Quebec Agricultural Marketing Board confirms that the contract, if any, has not been ratified by it.
7. Since January 1962, a group of vociferous non-fluid producers in the Sherbrooke region has been claiming the right to share in the price obtained by fluid producers provided milk qualifies as to quality for the fluid market.

Albeit the above listing of events contains more than an adequate number of rumours (rumour defined here as being a report, from highly qualified sources, of information that has not yet been made public for one or more reasons), this situation is alarming. First of all, what, if any, is the justification for all the rumours, and the cloak and dagger secrecy. As far as Quebec is concerned, the above sequence of events is beginning to have the appearance of a "you scratch my back, I'll scratch yours" story.

The above events are an arrogant display of irresponsibility on the part of our best educated and economically strongest group of producers, The Fluid Milk Shippers. It appears also to symbolize a weak kneed approach by Quebec public authorities involved in the issue who are simply marking time, or so it would appear. The position of the Federal Government is more difficult. It's a hanged-if-it-does situation (witness the producer contingent which visited

Ottawa following the March 22nd announcement), and a case of political expediency if it doesn't (our interpretation of the April 9th policy statement).

What is the answer, in terms of action, for the present situation? Over the long term, it appears that production must be equated more closely to demand. Some dairy farmers are bound to get hurt in such a situation. For the good of the industry it would appear that our marketing mechanism should be so altered that the pain of adjustment can be distributed fairly evenly over the industry. This should result in a culling of the less efficient producers and a healthier industry as a result. The complaining producers from the Eastern Townships, who are shipping to processing plants, have a legitimate complaint. If they can produce milk of a quality for the fluid trade, they should have the opportunity and encouragement to do so and to receive the same pay as fluid trade shippers. The first step toward improvement is to devise a system whereby all producers who can supply a product of acceptable quality will be paid the same price for it. While there may be no quarrel for separate prices for milk for fluid consumption and that for processing, there certainly is a strong case for a quarrel with the system which at present determines who will be a fluid milk shipper and who will be a processing milk shipper.

Inherent in this proposal should be the abolition of the quota system, as it presently applies to fluid milk shippers. The present quota system contains two fundamental weaknesses. First, it promotes high production during the high cost winter period, and therefore promotes inefficient production. Secondly, at the same time it promotes inefficient production, it promotes increased production. It is a treadmill from which, once producer is on, he cannot escape unless he jumps right out of the industry completely, or loses his competitive position with other producers.

If quotas are necessary, surely there is a better way of determining them.

Every avenue which might increase consumption of fluid milk should be explored. In this respect, it would appear that the minimum price applying to retail sales of bottled milk should be removed completely or lowered sufficiently so that it does not represent the effective selling price, but merely prevents loss leader sales. Greater competition in the retail fluid milk trade should increase consumption of fluid milk in the Province of Quebec.

If there is to be any realistic assistance for the dairy industry, the Provinces of Ontario and Quebec must synchronize their marketing programs. Ontario appears to be developing some kind of a marketing scheme, and Quebec should follow suit, not because Ontario is doing it, but just because it is in the best interest of Quebec producers. Until these two provinces can clear up their marketing program, they would be well advised to spend their energies at home rather than running to Ottawa.

Statesmanship on the part of the fluid milk producers, and particularly their leaders, as well as on

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EDITORIAL . . . (Continued from page 99)

the part of other dairy groups, is badly needed. Perhaps the producers should take a close look at their dairy organizations which are supposed to represent them in the dairy field. A close examination might indicate that the leaders of the Montreal fluid milk producers, representing not more than 7 per cent of Quebec dairymen, are by far the most powerful group. After all, if the rumours are true that the Montreal milk producers have signed agreements for higher fluid milk prices, this can only increase the disparity between the returns for fluid milk and those for processing milk. Under present conditions this is a very negative step.

Of course the other unanswered question in this issue is whether or not the dairies should have been allowed a two cent price increase in the price of bottled milk at retail sales level, but then, perhaps, this issue would never have arisen had the minimum price policy for retail fluid milk been abolished and competition allowed to air the industry.

We need some positive action and statesmanship. Let us do away with the cloak and dagger mystery now rampant in the industry which, after all, is only evidence that something is amiss.

by L. G. YOUNG

INSECTS IN CORN (Eastern Canada)

This 20-page booklet describes the different types of insects common to Eastern Canada. It outlines the life cycle of each, the type of damage it causes and the most effective kinds of control. There are notes on the application of insecticides. First printed in 1955, it was revised in March 1962. May be obtained from the Canada Department of Agriculture, Ottawa, Ont. Publication 945.

EGGS

This 90-page booklet describes in detail with pictures the production and marketing of eggs. Factors affecting quality are considered in detail as in the food value of eggs. A must for egg producers, graders, and processors. Revised September 1961 and available from Information Division, Canada Department of Agriculture, Ottawa. Publication 782.

BETTER FARMING DAY
Macdonald College
June 26, 1962.

OUR COVER PICTURE

This method of packaging butter is almost a thing of the past. Hand-wrapping is still practised in some small plants lacking capacity to justify costly machinery. This picture was taken in 1961 at the Farrelton Creamery Co-operative of Gatineau County.

“I’m going to let you have \$25,000.00 on one condition!”

Twenty-five thousand dollars is a great deal of money today. Any of us who would try to borrow that much from the bank would find that out. In 1896, when the Tornado ripped through St. Louis and wiped out much of its industry and commerce, \$25,000.00 was a fortune!

Young Will Danforth was just one of hundreds who crowded the Mechanics Bank trying to borrow money. Some needed a few hundred dollars. Some needed a few thousand to get back into business. Will Danforth went directly to Walter Hill, the bank manager, and asked for twenty-five thousand!

“What have you got for security?” the banker asked. Will wondered, too. He had the property . . . and the pile of bricks and broken machinery; all that was left of the mill after the tornado struck. A pile of broken brick wasn’t worth much; St. Louis was a city of broken, tornado-ripped buildings. Finally he answered, simply and honestly. “Nothing,” he said. “I guess I have nothing but my own word . . . and the record growth Purina has demonstrated since we started two years ago.”

What do you have to know about a man to loan him that much money? The banker knew that young Will Danforth was a good citizen, a man of character — already building a reputation as a Christian businessman. “I’ll tell you what I’m going to do, Will Danforth,” the banker said. “I’m going to let you have the \$25,000.00 . . . on one condition.”

“What is that?” Will asked.

The banker was not smiling. He said, “On the condition you put up that little girl of yours as security.” “My daughter?” Will was shocked and surprised. He hadn’t expected an answer like this. This was too much like something from a melodrama. Then it was that the banker smiled. He had made his point. He was trying to impress upon the young man the fact that his whole family’s reputation would be at stake if he loaned the money. He needn’t have worried.

Will signed, and his signature was the only security. The money was supplied and a new Purina Mill was built. And the company Will founded has never stopped growing. Today the Ralston Purina Company operates over 68 plants with another half dozen on the drawing boards.

The Ralston Purina Company, Limited, the Canadian Company, has its own Canadian Directors and its own mills . . . Purina’s Canadian dealers have their own magazine on profitable feeding practices that goes out to over 60 thousand Canadian farmers regularly.

Next time you notice the Red-and-White Checker-board on a Purina Dealer’s Mill or Store, remember Will Danforth, a young man who had the vision to start over when he had been wiped out. A young man who had the personal magnitude and desire-to-work that carried the Red and White Checkerboard half way around the world.

Watch for Chapter III entitled, “Red and White Checkers in his Blood!”

Canadians who want bigger profits tomorrow feed Purina Chows today.



RALSTON PURINA COMPANY, LIMITED
WOODSTOCK TORONTO WHITBY MONTREAL SAINT JOHN

GRAIN CORN IN QUEBEC

by L. G. YOUNG
with assistance of
Prof. R. I. BROWN, Department
of Agronomy and
Val VOYER, Champs
Pleins Seed Inc.

The prospects for grain corn production in Quebec are improving every year. New early corn hybrids are now available which make grain corn production possible in most of south-western Quebec. Indeed, the forecast acreage in grain corn in the Province of Quebec for the growing season of 1962 is set between 3500 and 4000 acres.

Much of the boost for grain corn production has come from two sources. The Champs Pleins Seed Inc., a commercial seed company located at Ste-Rosalie, Que., and operated by The King Seed Co., of Chatham, Ontario, with the support of the American Pride Co., of Wisconsin is actively promoting commercial production of the crop; in addition, Macdonald College has carried on a corn breeding program for many years. This year, two young agronomists, enthused by the results obtained at Macdonald College and by the Champs Pleins Seed Co., are contracting production of about 2000 acres of grain corn. With the memory of last year's higher feed prices still fresh and the possibility of a similar experience this coming winter, it seems like a good time for Quebec farmers to take another look at the potential grain corn production.

Corn Out Yields Oats And Barley

The accompanying tables provide a comparison of yields between oats, barley and corn. These tables are based on tests conducted at Macdonald College and Ste-Hyacinthe at the dairy farm. The 5-test average yield in bushels per acre for oats was 92.6 against



Val Voyer, Champs Pleins Seed and C. Whetty, American Pride Co., inspecting a field of Pride 5 in late September of 1961. This is the fifth successive crop of corn on this field at Ste-Rosalie. Pride 5 is one of the recommended grain corn varieties.

YIELD COMPARISON

OATS			
	Macdonald College 3 Year Average	St.-Hyacinthe 2 Year Average	5 Test Average
Glen.....	88.6 (3012 lbs.)	102.1	94.0
Shefford.....	88.7	93.6	90.7
Garry.....	89.7	98.6	93.2
Average.....	89.0	98.1	92.6

92.6 bu. per acre x 34 lbs. per bushel = 3148.4 lbs./acre
TDN of oats 66%; TDN per acre oats 2078 lbs. = 100%

BARLEY			
	Macdonald College 3 Year Average	St.-Hyacinthe 2 Year Average	5 Test Average
Parkland.....	62.0 (2976 lbs)	92.2	74.1
York.....	65.7	95.9	77.8
Montcalm.....	60.7	78.2	67.7
Average.....	62.8	88.8	73.2

73.2 bu. per acre x 48 lbs./bushel = 3513.6 lbs./acre
TDN of barley 71%; TDN per acre barley 2495 lbs. = TDN 120% TDN per acre oats.

GRAIN CORN

Average of 3 Years — 1959 - 1960 - 1961

VARIETIES	Per Cent Moisture at Harvest			Yield Shelled Corn at 15% Moisture bus./acre		
	M.C.	St-H	Average 2 Stations	M.C.	St-H	Average 2 Stations
Quebec 28 (Local Variety)	28.2	38.6	33.4	41	73	57
Pride 4 (Hybrid).....	29.4	35.8	32.6	74	100	87
Funk's G-2 (Hybrid).....	30.1	35.3	32.7	67	90	79
Jacques 802-J (Hybrid).....	30.8	34.8	32.8	72	97	85
Warwick 263 (Hybrid).....	33.8	38.8	36.3	78	110	95
Pride 5 (Hybrid).....	33.9	38.2	36.1	79	111	95
Av. 6 varieties	31.0	36.9	34.0	68.5	97	83
Av. of 5 recommended Hybrids.....				74*	102**	88

*Medium Fertility

**High Fertility

88 bu. per acre x 56 lbs./bushel = 4928 lbs./acre
TDN of corn 80%; TDN per acre corn 3942 lbs. = 190% TDN per acre oats



Prof. Robert I. Brawn, holding two ears of *Pride 4*, in the "corn room" at Macdonald College. Prof. Brawn is constantly trying to develop new and better varieties of grain corn. Many hundreds of crosses are behind every improved variety. In the background assistants are counting out seeds of varieties which will be given a field trial.

73.2 bushels per acre for barley, and 88 bushels of corn on tests over 3 years for the five recommended corn hybrids.

Converting this to pounds per acre, it will be noted that oats yielded 3148.4 lbs., barley 3513.6 lbs., and corn 4928 lbs. The TDN (Total Digestible Nutrients) of corn is higher than that of oats and barley. In fact, the amount in pounds of TDN per acre of oats

was 2078, for barley 2495 and for corn 3942. Converting these figures to percentages, barley yielded 120% and corn 190% of the TDN obtained per acre of oats. The TDN per acre for corn was about double that of the TDN per acre for oats.

New Varieties

Only the very earliest hybrids will succeed in maturing sound

grain corn and there are not many of these available to choose between although others are in the advanced test stage. Five hybrids have been tested by the Quebec Seed Board for several years in south western Quebec (see tables), in comparison with the locally adapted flint variety, Quebec 28, and were found to ripen in most years.

Referring to the tables, the superiority of hybrids over open pollinated varieties is at once evident. In general, the later the hybrid, as evidenced by the higher percent moisture at harvest, the higher the yield. The tendency, therefore, which must be overcome, is to place yield before maturity in choice of a variety.

Following extensive tests over many years, workers at Macdonald College have decided that earliness of maturity is the key factor in the possibility of successful grain corn production in Quebec. Hybrids are now being developed and tested which are even earlier than those recommended by the Quebec Seed Board, and reported above. Variety also has some bearing on the rate of drying of the crop in the fall, as some varieties

(Continued on page 105)

Monopoly in Milk in Montreal?

Farmers have been fooled into believing that if the resale price controls on milk were removed, then

1. price wars would result among the dairies;
2. the small dairies would be forced out business;
3. the surviving monopolists would raise the price to the consumer;
4. this would mean a smaller market for farmers.

This is a myth used to exploit the farmer by shrinking his market, and the consumer by forcing excessive retail prices.

What Happened in Toronto

Eight years ago resale price controls were removed. But not the farmers guaranteed Class I or quota price. What were the results in Toronto?

THE FACTS SPEAK FOR THEMSELVES

	TORONTO	MONTREAL
Resale price control	No	Yes
Price to farmer	\$5.07 cwt.	\$4.89 cwt.
Increase in quota or Class I	50%	30%
Sales per farm (1954 - 1961)	3 quarts for 55¢	3 quarts for 68¢
Price to consumer in stores	25¢ quart	25¢ quart
Home delivery price	26	25
No. dairies 1954	19	20
No. dairies 1962	10%	4%
Increase in Fluid		
Sales 1956 - 1961		

This same experience has been repeated in dozens of markets in the United States.

Your **Safeguard** against price wars, monopolies, and other abuses is the Quebec Dairy Industry Commission because:

1. The Commission has the power to demand audited financial statements from Montreal dairies to determine if loss leader selling exists **OR** if excessive profits exist.
2. The Commission can impose a maximum price ceiling to prevent excess profits.

This is the Toronto program. Everyone is happy — especially the producer-suppliers. Resale price controls must go. Fluid sales must expand rapidly. Tell your leaders.

PERRETTE DAIRY LIMITED,
3750 Cote Vertu, St. Laurent, Montreal.

POTATOES

HANDLE WITH
CARE!

by Prof. H. R. MURRAY,
Department of Horticulture



For a good stand, allow the seed stock to develop short sprouts before cutting. This requires removing them from storage to a warmer temperature of around 60 degrees, about two weeks before cutting. The newer varieties such as Kennebec and Sebago have rather weak lateral sprouts, whereas the terminal or apical sprout is strong. The pieces with lateral buds come slower and sometimes result in missing hills. These missing hills may be avoided by using small, whole tubers, or split, medium-sized tubers, or even larger tubers, split and the butts cut off. When the growers use this kind of seed stock they usually grow it themselves. This will bring it one year from certified or foundation stock. They plant the sets in the seed plot rather close in the rows so that a high percentage of the crop will be made up of smaller tubers and thus will lend themselves to splitting into halves, rather than cutting into pieces.

Fertilizing and Growing

Fertilizer experiments with different mixtures seem to indicate that nitrogen, although important in producing high yields, tends to delay maturity and thus lowers specific gravity if it is in quantities of more than sixty pounds to the acre. Whether the chlorinate, or sulphate, form of potash should be used is still a question. The standard mixtures, or potato specials are, 6-12-12 or the 8-16-16 and they can be made with half the potash as sulphate and the other half as muriate, with magnesium added. Phosphorus is important for maturity and should be used in reasonably good quantities, of at least 150 pounds to the acre. However, I should think that fertilizers were more of a local problem than other aspects of production.

It has been shown repeatedly, in regard to soil organic matter, that potatoes grow better in soils which are relatively high in organic matter than in soils with a low organic matter content. Manures being unobtainable, and for other reasons too, potatoes should be grown in a rotation, containing a legume and, whenever possible, they should follow the legume which should, preferably, be alfalfa. Potatoes, followed by fall rye and alfalfa seem to do very well. Another rotation is grain, red clover and potatoes.

Good grass can be used to advantage where legumes cannot be grown.

Potatoes seem to need an abundance of oxygen to do well, and this is especially true of potatoes grown in the heavier types of soil. In the early days, potatoes grew very well in virgin soils but, as time went on, the yields dropped and, despite all the efforts of the experimentors, which centered around the use of organic matter and rotations, the yield could not be brought back. This was finally related to soil pore space. In the lighter types of soil, such as loams to sandy loams, this is not likely to become a problem because these soils are coarse-grained and thus well aerated. Also, these coarse-grained soils are preferred to any other type in producing crops with good skins and of a higher specific gravity, so it is not likely that a problem concerning pore space will be of importance, nevertheless it should be noted.

Throughout the summer, insect, disease, and weed control methods should be carefully observed. Healthy tops must be maintained, and kept on the plant, and the developing tubers must be kept covered so as to protect them from the light. Toward the end of the growing season, a sprout inhibitor such as a maleic hydrazide spray should be applied, if the potatoes are to be stored for processing, or stored at temperatures above 40°.

Harvesting and Storing

Modern cultural methods have resulted in the persistence of heavy vine growth up to digging time, so some method of killing must be used at least ten days before digging. This killing helps to loosen the potatoes from the vines, gives the skin a better chance to mature and toughen, and does away with the heavy vines which would otherwise clog the mechanized diggers.



Specific gravity of potatoes is determined by use of this gadget. A certain weight of potatoes, accurately determined, is put in this basket and lowered into water. Specific gravity is then read off of tube.

In years when late blight is a factor, vine-killing should be done in time to dispose of the host plant so that the diseased spores will die before digging starts, and thus reduce the danger of tuber infections.

In 1958, in the Montreal area three weeks were spent in checking the fields of the growers who had chip contracts so that they could be guided as to when, and how often, to spray for disease, whether this spray program should be discontinued and followed by the vine-killer. Each farm was considered separately. The results from this special care provided that the extra trouble was worthwhile because the losses from blight were very low, in fact less than 100 bags were lost in a storage of 40,000 bags.

Even though vine-killing is considered a necessary practice, it should be delayed until it cannot be put off any longer. Studies conducted in Maine showed that anything which causes premature death of the vines lowers the specific gravity of the tuber. Where disease is concerned, it is the choice of the lesser of two evils. There are a number of ways of killing the potato vines but the slow-killing solutions of the sodium arsenite potato vine-killer are considered to give the best results.

Harvesting should commence when the vines are dead but not before the skins have had a chance to toughen. On the other hand

where the potatoes are being grown for processing, harvesting should be completed before the soil temperature drops to below 50 degrees F. Harvesting operations should be very carefully carried out, avoiding all mechanical injuries. In the testing of some of the mechanical harvesters, I am told that hard-boiled eggs are buried in the rows and if these are broken the manufacturer considers that the machine handles too roughly. Whether the harvesting is done into bags, bulk wagons, or pallet boxes, every care should be taken to avoid injuries.

In storing, the temperature for the first few days should be around 70 degrees F., with a high relative humidity. This is to help the potato develop a periderm, or layer of cork cells, over the exposed surfaces and to protect the tubers against future injuries if they have to be re-handled. In addition, these cork cells will reduce moisture loss by transpiration and give added protection against the spread of diseases.

After the cork cells have formed, the temperature should be reduced to the holding level 38 to 40 degrees F. for table stock and 55 degrees F. if the potatoes are going to be used for processing. In respect to those being stored for processing, some recommendations are made for 40 degrees F. and others for 46 degrees F. The latter, or 46 degrees F., might be tried, especially with the Kennebec variety. However, the stored tubers will have to be reconditioned at 70 degrees F. before they can be used. Reconditioning at 60 degrees F. will resipre off the reducing sugars, but reconditioning at 70 degrees F., it is thought, will allow for the conversion of some of the sugars back to starch.

Good ventilation in the storage is important. In the processing industry it has been reported that both carbon dioxide and high humidity were contributing factors in causing dark-coloured chips unless the conditioning process was accompanied by good ventilation. From the work thus reported, it would seem that conditioning at 70 degrees F. was best accomplished when the Relative Humidity was 85%, and accompanied by a good flow of warmed fresh air. In any potato storage there should always be a continuous and free flow of air, thus eliminating all pockets of either cool or warm air. This is very important in the conditioning room. The air should not be allowed to become saturated with moisture to the extent that the moisture con-

denses on the ceiling and drips or condenses on the potatoes in the bins.

"It is wise to irrigate potatoes?" "Will irrigation reduce the specific gravity of the tubers?" The best information seems to be that additional soil moisture, in any form, uniformly applied will increase yields, but that such additional moisture tends to decrease the specific gravity of the potato tubers. In fact, it would appear that anything which increases yield is likely to reduce specific gravity. Of course, there is a limit to everything and when we have a summer such as we had in 1959, water should be applied, if it is available. About the best information we can give at this time is to maintain a moisture level of 50% of the water-holding capacity, tests to be made every week. Toward the end of August it would be wise to discontinue the watering.

Quebec produces a very large quantity of early potatoes which are readily consumed by the local markets; the smaller towns and cities of the Province are usually reasonably well supplied by local potatoes throughout the year; the larger cities, such as Quebec and especially Montreal, offer excellent market possibilities for the sale of Quebec potatoes throughout the winter. However, to get this market, the Quebec growers will have to organize, build storages, produce a grade better than their competitors and be prepared to adequately supply the market requirements from early fall until late spring.

GRAIN CORN IN QUEBEC

(From page 103)

have been found to dry much faster than others. Investigation is continuing in this area of study as well as on the effect that date of planting in the spring has on maturity in the fall.

Planting

Grain corn production is quite different from that of most crops produced on Quebec farms, and anyone considering growing grain corn should be well aware of this. First of all, contrary to present practice on many farms, the date of seeding is extremely important. There is only one right time to plant corn and that is as early as the weather will permit. One rule of the thumb is to plant as soon as possible after the soil temperature reaches 50 degrees. In most

areas of Quebec, this would be between the 15 and 25th of May. Professor Brawn, corn breeder at Macdonald College, estimates that one day in the spring is equivalent to several days in the autumn in the life of the corn plant. (Early planting should also be a rule of thumb for silage corn production although it is not widely practiced).

It has been found possible to plant corn with a seed drill in the Ste-Hyacinthe corn growing district, and although it may be preferable, it is therefore not essential that corn be planted with a regular corn planter.

Fertilization

Fertilization of corn is extremely important. It is generally reckoned that 100 bushels grain corn contains 150 lbs. of nitrogen. Working this backwards, it is evident that in terms of the "normal" application of fertilizer, corn will require huge amounts for successful crops. The present recommendation for fertilizer varies according to the fertility of the soil, from 400 to 800 lbs. per acre of 4-24-20 or 4-32-12 plus later applications of nitrate or urea. The nitrate or urea should be applied after the corn is well up in late June or early July. Tests have indicated that the timing of fertilization is extremely important. Mr. Val Voyer of the Champlain Seeds Inc. stresses two don'ts for farmers on the basis of his observations in the St-Hyacinthe areas — don't skimp on application of fertilizer as yields decline markedly, and don't apply green manure for corn production. The nitrogen must be readily available if it is to be used by the corn plant.

Weed Control

Weed Control in the grain corn crop is extremely important but does not present any very great difficulty. There are several recommended pre-emergence and post-emergence sprays which can be applied with the conventional weed sprayer. However, it is extremely important that weeds are kept under control as they steal precious water and fertilizer from the corn plants.

Harvesting And Storing

Harvesting of the grain corn is closely related to the manner in which the corn will be fed. If it is intended that corn should be fed to poultry, pigs or to ruminating livestock as a dry supplement,

then the first objective is to lower the moisture content of the corn. The farmer must decide whether to leave the corn in the field as long as possible to lower the moisture content, in which case he will lose some corn due to breakage, or to harvest while the moisture content is relatively high.

Southern Quebec and some of the northeastern United States are in a region in which the moisture content of the air remains relatively high, slowing down the drying process. Preliminary studies at Macdonald College indicate that after a certain date in the autumn, there is little to be gained by leaving the corn to dry further in the field, as the process may actually reverse. Val Voyer of Champs Pleins Seed claims that corn placed in cribs of narrow diameter, located so that wind and air may circulate freely through them are sufficient to carry corn over the winter and through spring. However, studies in New York State (a different location), which used square cribs of narrow dimensions, report some molding by mid-spring.

In the cornbelt of the United States some growers have found it profitable to harvest early, preventing loss due to stalk breakage, and dry artificially. This might well work in Quebec but it would certainly raise costs.

Alternatively, corn may be stored in Harvestores at a higher moisture content. La Société des Terres Noires, which last year grew several hundred acres and which this year has reported intentions to plant about 500 acres, follows this system. However, this is a beef enterprise, already equipped with Harvestore silos, which are expensive. In Southwestern Ontario attention is shifting to high-moisture (30 to 32% moisture content) ground ear corn which, it is claimed, has a higher feeding value than low-moisture ground ear corn for cattle.

However corn is harvested it should be kept in mind that the longer corn is left in the field the greater will be the loss due to stalk breakage. It is also important to remember that once frost strikes, if the ear is not quite mature, the full energies of the plant will be directed to developing the ear. Nutrients in the leaves and stalk will be directed to the ear. Gradually, as it dries, the rest of the plant becomes little more than cellulose of limited feed value.



Cribs of small diameter, such as this one at Champs Plein Seeds, are part of the answer to corn storage over the winter. In such narrow cribs the air has a better opportunity to dry corn.

Pickers required to harvest ear corn cost money and require some experience to operate. However, if this investment is justified, they may be used through most of October, November and early December and can therefore handle a large acreage.

Corn may be stored in cribs made of snowfence. Protection from direct rain and from vermin will suffice to carry the corn through till warmer weather, when the problem of molding may have to be faced unless it is fed by then or has dried sufficiently.

Feeding

If corn is to be used for poultry, it must be removed from the cobs. At present feed mills in Quebec are not equipped with machinery to do this, although as more corn is grown, this problem will likely be overcome. Pigs will shell the corn themselves, although there may be some loss due to wastage.

Corn and cobs may be ground, even if the moisture level is high, especially in winter, provided it is not stored in quantity and allowed to heat. Some farmers in the Ste-Hyacinthe area have been grinding their corn with their own mill, small quantities at a time, and feeding it directly to cattle. Non-ruminants, pigs and poultry,

which have a different digestive system than ruminants, have difficulty with the cobs in such ground feed.

It is likely that a trade in corn will develop as production increases, providing a ready market especially for shelled corn of moisture content of 15-20%.

Pros And Cons

Corn yields a much higher TDN per acre than either oats or barley. It may fit in especially well in poultry enterprises as a means of using rich poultry droppings and as a source of feed. It has a cash crop potential in certain regions. It may serve to spread the field labor load over a longer period.

On the other hand it requires extremely good management for

Most Common Mistakes In The Production of Grain Corn

1. Planting too late
2. Lack of adequate fertilization
3. Allow weeds to get out of hand
4. Using green manure

successful production — experienced management not available on most farms. It requires special equipment such as row-crop tractors (which may be used for other duties), machines for band application of fertilizer, probably a cultivator, and then, of course, harvesting equipment. It must be fitted into the feeding or cash crop program and into the field program. Since there is usually some residual fertilizer following a corn crop, this may pose a problem as oats and barley may lodge.

There is a frost risk which supporters say is little greater than the risk of severe lodging in oats or barley or of an impossibly wet harvesting season. Corn plants at the early leaf stage can recover from as much as five degrees of frost, although they will be set back somewhat.

Frost before maturity is a greater problem. While an early killing frost is a possibility, if corn is planted early, an early autumn frost is not likely to occur before the ear has adequately matured, in those parts of Quebec suited to corn production.

The Outlook

Grain corn has been successfully grown at Lennoxville, in the L'Assomption-Joliette area and in the district from Ste-Rosalie through to Howick and Ormstown. Last year Cyril Rolfe grew some

at Bishopton.

This year Gilles Choquette and Pierre Perron, two young agronomists, are contracting about 2000 acres of grain corn in the L'Assomption region. They will supply equipment and sell the harvest. Requests for seed indicate that between Verchères and Ormstown at least another 1000 acres, probably more, will be planted by farmers on their own.

If corn yields a higher TDN than oats or barley, it also requires more fertilizer. Cost of producing a bushel of corn is higher than producing a bushel of oats, states Dr. Haver, economist at Macdonald College. How much higher? That will depend on how it can be fitted into the operation you now have.

NEW LICENCE REGULATIONS FOR FARM MACHINERY

The following information on registration of farm machinery is from the Quebec Motor Vehicle Bureau. Quote:

By authority of Order in Council No. 556, dated March 13th 1962, the farm tractor, the property of a farmer whose livelihood is farming, and circulating on the public highways, will be registered, in future, at the fix rate of \$5.00, "C" license plate included.

The trailer belonging to a farmer whose livelihood is farming, and being used for no other purpose than to transport the produce of his farm, will be registered at the same rate as before, that is:—\$0.50, "R" plate included.

All machinery and all farm equipment, except tractors and trailers having an apparatus for the load and circulating on the highways of the Province, the property of a farmer whose livelihood is farming, is exempted from registration.

A farmer is not obliged to register a tractor used exclusively on his farm and which does not circulate on the public highways.

CO-OPERATIVES IN CANADA

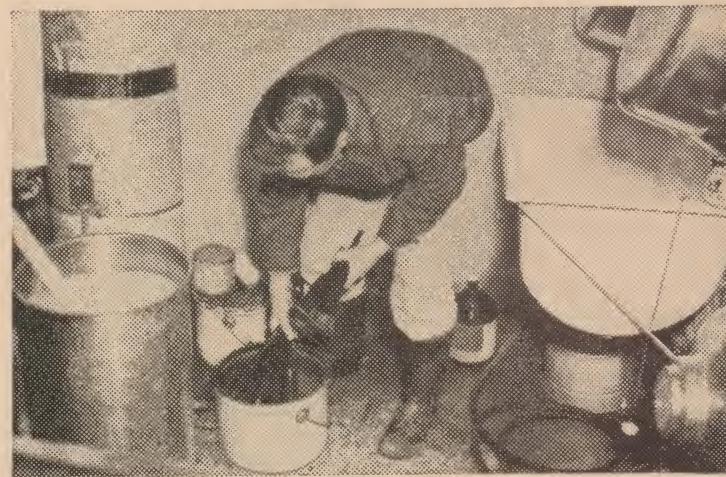
This 32 page publication outlines the early history, growth, development at 1960 and prospects for development of the co-operatives in Canada. A wealth of information for those desiring information on the co-operative movement. Published April 1962, Publication Number 1119. Available from the Information Division, Canada Department of Agriculture.

Gets bacteria counts less than 6,000 with Gillett's Lye!

Bill Hamilton of Carrickfergus, Ontario keeps a herd of 70 purebred Holsteins, and sells to the fluid milk market. Naturally, low bacteria counts are of prime concern to Mr. Hamilton. Using a cleanser and a solution of Gillett's Lye, here is how he is achieving remarkably low bacteria counts, averaging between 3,000 and 6,000.



Preparing Solution. Mr. Hamilton prepares a solution of Gillett's Lye by dissolving two level tablespoons in a gallon of water. He uses this solution to clean and disinfect his milk pipeline. Lye causes no troublesome foam, and bacteria can't escape.



Rubber Inflations Stored In Solution until next milking. Lye solution kills bacteria on the surface and in the pores of rubber. It extracts fat in the pores, thus helps inflations keep shape and tension, resulting in longer life.



FOR FURTHER INFORMATION on the Lye Method of caring for milking machines and rubberware, write to Standard Brands Limited, 550 Sherbrooke Street West, Montreal.

IN REGULAR SIZE AND
MONEY-SAVING 5 LB. CANS.

THE FAMILY FARM

PUBLISHED IN THE INTERESTS OF THE FARMERS OF THE PROVINCE
BY THE
QUEBEC DEPARTMENT OF AGRICULTURE

Compiled by T. Pickup of the Information and Research Service, Quebec Department of Agriculture.

AIL FOR SETTLERS

The Minister of Agriculture and Colonization is anxious for settlers to know about the various forms of assistance which the Provincial Government makes available to them. Following is a brief account of the different policies which are intended to help settlers to transform new farm lands more quickly into profitable agricultural enterprises.

Since last summer, a new subsidy of twenty dollars an acre has been available under certain conditions, for the clearing of land. The settler may also apply for grants of up to forty dollars an acre for the removal of stumps and for ploughing, on the same conditions as in the past.

Out of a lot comprising 100 acres, up to 60 acres are now eligible for government subsidies.

The Act concerning land settlement has now been amended in order to allow a settler, under certain conditions, to acquire two lots of 100 acres each. Providing that the land in question is arable, this means that a settler may claim government assistance for the development of a total of 120 acres of new land.

It is expected that, during the fiscal year ending on the 31st of March 1962, the total sum granted to settlers for the clearing of land, removal of stumps, and breaking will amount to \$600,000.

Subsidies for the building of houses and erection of farm buildings on newly settled lots have been doubled. The Government has had new plans and estimates prepared with a view to ensuring that the settler's home will be in no way inferior to that of a man working in industry in the city.

The amount of establishment credit available to a settler to help him to acquire livestock and essential agricultural implements may now reach a maximum of \$2000.

Legislation governing the acquisition of farm lands allows the Department of Agriculture and Colonization to buy abandoned land at a maximum price of \$4000 a farm, for the purpose of devot-



Mr. I. St.-Pierre and his son Claude clearing land on their farm at Ste-Odile, Rimouski.

MILK-FED OR GRASS-FED CALVES?

It is generally agreed that the rearing of milk-fed calves is a paying proposition. Mr. Georges Mayrand of the Quebec Department of Agriculture, considers that, during some months of the year, calves can also be profitably marketed off grass providing that they are of good quality.

Mr. Mayrand says that the farmer is naturally anxious to derive the maximum possible profit from his enterprises: the dairyman, for instance, who sells his milk privately, is not in the same position as the farmer who ships

it to the enlargement of the farms of settlers and farmers. The new acquirer of such land has only to pay 10% of the purchase price in cash and may benefit from a loan amortized over a period of twenty years, of which ten years are free of interest.

Settlers wishing for further information should not hesitate to consult representatives of the Department of Agriculture and Colonization.

to a factory. Or again, during certain months, when veal is fetching thirty cents a pound, milk which is fed to choice calves may realize an average price of four dollars a hundred, which is higher than that paid for surplus milk.

In other words, it pays the farmer to take into consideration the form in which he offers his products for sale, and their quality as well as mere quantity. Those who ship milk to factories at an average return of \$2.60 a hundred pounds would certainly be well advised to pay more attention to this aspect of the economics of farm management. As a rule, the more remote farms do not have such ready access to markets for the sale of their animals; calving takes place mainly in spring and the calves are sold when they are still too young and underweight. As a consequence the market becomes clogged with animals of inferior quality, prices begin to decline and farmers are tempted to rush their calves to market before prices fall even lower, with

(Continued on page 112)

CHOOSING AND PLANTING ANNUAL FLOWERS

Although annual flowers are easy to grow, at least a little care and attention must be given them if good results are expected. The three main points to be considered are location, planting, and choice of plants.

1. Location: A sunny spot will suit most annual plants — that is to say, from the point of view of maximum flower production. A shady location, on the other hand, tends to make plants grow spindly and produce extra foliage instead of flowers.

2. Planting: Generally speaking, annuals should be planted between the end of May and the middle of June, depending on local conditions. They should be planted in sandy-clay (loamy) soil, to which a little organic matter such as peat-moss has been added so as to help it to hold moisture. The use of manure or any high-nitrogen fertilizer on annuals is not advisable, because these also encourage too much leaf growth which great-

ly hinders flowering. It would therefore be better to use fertilizers containing relatively high percentages of phosphorous and potassium.

If you wish to raise annuals from seed in your own home, the ideal time to sow the seed would be between the 15th of March and the 1st of April, the exact date depending on the time of blooming of the kind or variety in question. After the seeds have germinated and the seedlings have got about two true leaves (that is, about five or six weeks after they have come up) the young plants should be transplanted into pots or flats. They should be spaced about two inches apart so that they will have enough room to grow and develop properly and be big enough, by transplanting time, to come quickly into flower.

3. The Choice of Plants: Nowadays, it is becoming increasingly easier to choose plants, because

(Continued on page 112)

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture.

HEDGES

Any home owner who wants to make his property into an attractive and secluded retreat should surround it with a hedge. But such a hedge, if it is to remain vigorous and decorative, needs considerable care. That is why, to begin with, it should be planted in soil which is rich in organic matter and plant nutrients. Mr. Roland Gilbert of the Quebec Department of Agriculture believes that poor soil is always a cause of failure.

Pruning is necessary to ensure that the hedge will bear leaves from top to bottom. (It is in this complete foliage, after all, that the beauty of a hedge consists). Pruning should be done once or twice a year; the manner and severity will depend on the kind of shrubbery and the stage and rate of growth. About the end of June and the beginning of July is a good time to prune a hedge.

Although the square-shaped type of hedge is most popular, it is nevertheless also the least advisable form. A rounded or a gothic style (wider at the bottom than at the top) allows the light to penetrate and encourages better leaf growth.

Hedges of evergreens are pruned less severely than deciduous hedges, since they do not easily produce new shoots on their older branches. They are also pruned at the end of June.

Weeds are as much out of place under a hedge as in a flower bed; unless kept in check, they will make a hedge look untidy and, at the same time, deprive it of the nourishment it needs for its proper development. Remember too, that when the lawn is kept well cut on both sides of the hedge, it will be easier to control the weeds near the hedge, and the property will look neater.

Since hedges are intended to remain in the same place for a long time, the need for fertilizing them should not be forgotten: organic or semi-organic materials are recommended for the purpose. Sheep manure, at the rate of from 50 to 75 pounds per 100 feet of hedge, and bone meal at the rate of 10 to 15 pounds per 100 feet, applied early in spring, give very good results.



Noelline Létourneau cutting flowers in her garden at Lamorandière, Abitibi-East.

POTATO Maturity BEGINS IN SPRING

Although it may be true that size of crop is still the chief single factor of success in potato production (35 to 50% of variation in cost of production is attributable to differences in yield), nevertheless it is becoming more and more urgent for those who want to earn maximum profits from potato growing to improve the quality of their crop.

As a result of present trends in the marketing of potatoes, both for raw consumption and in processed forms, the days are numbered in which it will be possible for the grower to make a profit on potatoes of inferior quality.

Maturity is one of the most important as well as one of the least understood of the factors which affect quality. Without maturity, it is impossible to obtain:

- 1) reasonable resistance to skinning and injury;
- 2) acceptable appearance in transparent packages;
- 3) the high percentage of dry matter which is so much in demand by processors;
- 4) that colour, odour, flavour, and texture which the consumer has a right to expect in his food.

It is scarcely necessary to point out that the shortness of our growing season and the lateness of our most popular varieties makes it somewhat difficult to attain this objective of maturity. However, it can be achieved by the use of certain methods, the most effective of which may be applied at the beginning of the season.

VARIETIES — It would be advisable for a great many growers, who now plant only late varieties such as Katahdin, Kennebec, Green Mountain or Sebago, to include in their plantings a few acres of earlier varieties such as Avon, Cherokee, Fundy, Irish Cobbler or Keswick. This would make it possible for them to start harvesting earlier in the fall, without sacrificing anything in the way of maturity and quality.

SPROUTED SEED — Whatever varieties are used, a considerable amount of time can always be saved by bringing seed potatoes out of storage about three weeks before planting time. The best method is to spread the potatoes in a thin layer on the floor (preferably wooden) of a well-lighted building and to turn them over



This sprayer will handle twenty rows of potatoes at a time — a far cry from the barrel and hand pump rigged up on a cart which used to handle two rows at once.

three times during the three weeks. This procedure gives the tubers time to warm up and put forth sturdy sprouts, about three sixteenths of an inch long, before they are cut up and put into the ground.

PLANTING TIME — It is a mistake to put off preparing the ground for potato planting until all the grain has been sown. The amount of money which is invested in potatoes requires that this crop be given priority treatment. Early planting is the main way to prolong the growing period. By harvest time, the potatoes which were planted early will be the ripest and, generally speaking, will give the biggest yields.

DATE OF EMERGENCE — The date on which the shoots appear above the ground is almost as important as the planting date, since the plants cannot begin to make carbohydrates until the leaves have spread themselves to the light. This event can be hastened by not covering the seed potatoes, when planting them, with more than two or three inches of soil: especially to be avoided is the practice, unfortunately too widespread, of burying the young shoots again as soon as they have pierced the ground—unless this operation is absolutely necessary for the control of weeds (which ought only to be the case in exceptional circumstances).

APPLICATION OF FERTILIZERS — As regards the use of fertilizers, it is necessary to make a

compromise between the claims of yield and quality. The chief danger to be avoided is excess of nitrogen, since too much nitrogen delays maturity. Only on the basis of a soil analysis and in special circumstances, says Mr. Luc Bissonnais of the Quebec Department of Agriculture, should the grower apply more than 140 pounds of nitrogen to the acre.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture.

THE CONTROL OF INSECT PESTS OF POTATOES

At this time of year, potato growers are busy getting the land ready for the coming planting. Mr. Gérard Rioux of the Quebec Department of Agriculture suggests that now is also the time to start thinking about protecting potato fields against the insects which attack the plants and reduce the yields.

The first insect to make its appearance is the Colorado potato beetle. Adults and larvae feed on the leaves and, if left undisturbed, can quickly strip the plants. The grower should keep his eyes open for them, since they are known to produce at least two generations a year.

Flea beetles follow potato beetles very closely in order of appearance and they are also rated second in importance as pests. They are small, black insects, about the size of a pin-head, which riddle the leaves with tiny holes as soon as the shoots emerge from the

round. Since there are two or even three generations a year, they too are greatly to be feared.

Next appear the leafhoppers and the tarnished plant bugs, both sucking insects. They are fluctuating and irregular in numbers and time of occurrence, but should nevertheless always be considered to be very dangerous enemies of potatoes. Apart from the considerable damage they themselves do to the plants, there is also the still greater harm done to the crop by certain virus diseases which they may quickly spread.

For the control of these four pests, two insecticide treatments are recommended in June; the first to be applied when the insects make their appearance, and the second about fifteen days later. *For spraying*, use either of the following insecticides:

DDT 25-E, 1½ quarts per acre, or

DDT 50-W, 2 lb. per acre, or
ENDRIN 20-E, one pint per acre or

THIODAN 2-E, one quart per acre.

For dusting,

there is a choice between DDT 5-D or ENDRIN 1-D, at the rate of 20 to 30 pounds per acre.

Treatment should be repeated in July and August if these insects appear afresh.

Often, during the month of July, another very harmful insect appears on the potato plants, namely the aphid. Green in colour and scarcely one eighth of an inch in length, aphids live in clusters along the stems and on the underside of the leaves. They suck sap from the plants so that the leaves roll up, wither, and die. Aphids multiply rapidly and there are several generations during the season. They are recognized as the most dangerous carriers of virus diseases. One or other of the following treatments may be used against them:

For spraying,

MALATHION 50-E, at the rate of one quart per acre, or
ENDRIN 20-E, at the rate of one pint per acre, or
THIODAN 2-E, at the rate of one quart per acre.

For dusting,

MALATHION 4-D or ENDRIN 1-D, at the rate of 20 to 30 pounds per acre.

Any potato grower will be able to control insect pests of his crop by following the foregoing advice.

CHEMICAL WEEDKILLERS FOR POTATO FIELDS

The use of herbicides to destroy weeds in fields of potatoes and thus reduce the costs of cultivation, is beginning to be fairly general. Mr. Gilles Emond of the Quebec Department of Agriculture makes the following recommendations:

In fields where broad-leaved weeds are a problem, the amine salt of DNBP is used, applied at the rate of one gallon per acre of the commercial product in at least 50 gallons of water. If a serious infestation of annual grasses is feared, DALAPON at the rate of 4 pounds per acre should be added to the DNBP spray. In either case, the treatment should be applied immediately after the last hilling. Following this application, avoid working the soil for a period of 4 to 5 weeks, so as not to spoil the effect of the herbicides.

The foregoing treatments destroy annual weeds but do not af-

fect either couch grass or other perennial plants which have already established themselves. For

the destruction of these perennials, treatments may be applied either in the fall or in spring, as follows:

1. Treatment in the fall of the year preceding the growing of the potato crop may be applied in mid-August or in mid-September, when the couch grass is in full growth. The herbicide to use is DALAPON at the rate of 15 pounds of the commercial product to the acre, in 50 or more gallons of water. The land should be well ploughed 12 to 14 days after this treatment.

2. Treatment in the spring is applied in the same year as the crop, when the couch grass is about 6 inches high. The quantity of DALAPON in this case is restricted to 10 pounds per acre of the commercial product in at least 50 gallons of water. The field is ploughed 8 to 10 days after this treatment, and is then ready for potato planting.

Please note that the foregoing recommendations are not intended for the destruction of weeds in potato plantations on organic (muck) soils.

PLANT DISEASE CONTROL

Information about the control of plant diseases will be found in the different Protection Guides published by the Provincial Department of Agriculture and issued free on request.



A new barn under construction on Mr. J. Croteau's farm, Amos, Abitibi-East. The evergreen tree fastened to the ridge proclaims in traditional manner that the framework is completed.



Adequate pasture throughout the summer is the key to successful dairy production in the Province of Quebec.

GRASS IN ABUNDANCE

Farmers have three effective methods of pasture management at their disposal for obtaining a plentiful supply of grass throughout the growing season. Mr. Rodolphe Cloutier of the Quebec Department of Agriculture believes that they would find that it would pay them to make much more liberal use of these methods, which are as follows:

- 1.—The reseeding of old pastures;
- 2.—The adequate application of manure and commercial fertilizer;
- 3.—The methodical control of grazing.

Many pastures, the yield of which may seem satisfactory from the point of view of quantity, are actually producing grass whose quality leaves much to be desired from the point of view of milk production. Moreover, this delusive abundance of grass is often only available for an all too brief period, mostly at the beginning of the grazing season. The rejuvenation of these old pastures, either by seeding or by means of generous fertilization, will result not only in grass of better quality but also in an increase in the number of days of grazing, spread out over a much longer period.

Manure and commercial fertilizers produce quick results, even though perhaps not in the year of their application. There are plenty of pastures, in their second and third year after seeding, which only need a good top-dressing of manure or fertilizer to double or treble their yield.

On the whole, the control of

grazing is an aspect of pasture management which is too often neglected, or improvised rather than planned. It is much better to divide the pasture into two or three sections which can be grazed in rotation. This system will permit intensive grazing and, at the same time, avert the waste and losses caused by too few animals pasturing too large a field. It is a well-established fact that, generally speaking, the best recovery is made when the plants are browsed down to about one third of their height. Pastures which are grazed too closely at the beginning of the season sometimes suffer badly with the coming of the hotter and drier summer weather. Finally it should be pointed out that the mower is a means of keeping pastures in a good state of vegetation and of preventing them from becoming ragged and weedy, which is within everyone's reach.

CHOOSING AND PLANTING ANNUAL FLOWERS

(From page 109)

there are markets, nurseries, and commercial greenhouses (all good places for buying plants) which offer a good choice as regards colour, quality, height, etc.

When buying his plants from these sources, the amateur gardener may also obtain valuable information about how to plant and care for them.

Mr. Charles Legendre of the Quebec Department of Agriculture advises lovers of flowers to make use of all such opportunities to get good results and, at the same time, economize.

MILK-FED OR GRASS-FED CALVES

(From page 108)

the unfortunate result that they aggravate the very situation which they hope to avoid. If the calves were only kept on the farm until they reached 175 pounds, the markets would not become flooded and prices for the better animals would be more remunerative. It has been proved over and over again that it pays to convert milk into choice veal.

Besides this, we have a considerable production of pasture-fed calves in this Province; in fact, about 12% of those which reach the market belong to this category. These animals are raised in counties which are situated at a considerable distance from large centres of population and there are a dozen such counties where the number of calves sold off pasture exceeds 1000.

It is rather difficult to compare the production of grass-fed calves with that of milk-fed calves, but, during certain months of the year, there is a profitable market for both. In either case, however, the thing to watch is quality.

If we take the weight of a good milk-fed calf as being 175 pounds (as compared with a general average weight for calves of barely 130) we can put the average weight of the calves marketed off grass at less than 300 pounds. This means that a farmer who keeps a calf for a whole season does not really gain much advantage by doing so, apart from having at his disposal a handy source of ready cash which he would not otherwise have set aside. If the weight of grass-fed calves could be increased by 50 to 100 pounds without the cost of additional labour, then this particular enterprise would undoubtedly be a profitable one for the farmer.

But it is always wise to ponder the question, whether pasture might not be put to more profitable use than that of raising calves and whether it might not pay better to feed the skim milk to some other kind of livestock—for example, pigs.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture.

Pioneers of Baldwin's Mills

The Letters Patent for the Township of Barnston issued by Lieutenant Governor of Lower Canada at Castle Saint Louis in the city of Quebec on the 11th day of April 1801, granted the said Township of Barnston to Robert Lester and Robert Morrogh and Associated in Free & Common Soccage. 64,580 acres of land was divided into blocks of 200 acres each.

On January 1st, 1810 a deed of sale to Lot 13 Range IX from Edward William Gray, Sheriff was made to the Honorable James McGill, later the founder of McGill University. This property was ceded to the heirs of the Honorable James McGill and is registered at the Stanstead Division Registry Office on May 31st, 1844.

The Baldwins and Baldwin's Mills

Levi Baldwin was a native of Connecticut and the great grandson of John & Mary Baldwin who were original settlers of New Milford, six miles from New Haven. He married Experience Goff and they moved to Vermont. Early in 1798 he came to Barnston with his two sons Lotes, 15, and Richard, 13. They made a clearing and put up a log cabin. Having completed this work they returned to their home in Westminster, Vermont for the winter.

The only settler in Barnston then was Captain Joseph Bartlett and his family, natives of Massachusetts, who had moved to Barnston in 1796.

In the spring of 1799 Levi Baldwin with his wife, two sons and younger children came to their log house and clearing on Lot 15 Range VI in Barnston. The Converse family came to Barnston at this time, the spring of 1799. Experience died in 1815 leaving two sons and three daughters. Lotes married Sarah Lamb, a native of Vermont; Richard Sr. married Betsey Drew.

It is not certain how many years the Baldwins operated Baldwin's saw mill before they could and did buy it.

There was a dam and saw mill at the lake outlet when the Baldwin family came in 1798. If the mill was run at all it was only a short time during the year. The

original grantees resided in Quebec City.

Richard Baldwin Sr. lived here and operated the saw mill and so did his son Richard Jr. as did Levi 2nd, son of Richard Sr., who lived here with his wife, Lydia Converse. On March 6th, 1850, Levi Baldwin 2nd sold to John Percival Baldwin Lot 13 Range IX. This deed applied to the betterments because McGill heirs held the proper title.

Arba Stimson of Compton bought it for 350 pounds Feb. 27th, 1855 and sold for 750 pounds April 27th, 1855 to John Percival Baldwin. Charles Carroll Colby witnessed this deed at the office of Notary Richardson. This included the saw mill at the outlet of what an old map called Barnston Lake, and which the map of the District of St. Francis in 1863 shows as Baldwin's Pond. Forests & Clearings in 1874 calls it Pinnacle Pond and recent topographical maps show it as Lake Lyster.

Edward P. Hill:

For many years a Sawyer in the Baldwin saw mill. He told us of the days of the Up and Down Saw before the Circular Saw. He lost one eye from a splinter kicked back by the board saw.

This one-eyed man in his mid-sixties went to the Mosher Meadow fishing with a teen-aged boy, Casmer Drew. They found the tracks of a bear that had gone into a clump of trees in this old beaver meadow. Casmer had a light .25 caliber rifle and Edward Hill proposed that Casmer with his rifle go to one side of the growth of trees and he would take a club and come in from the other side as they approached each other one of them would jump the bear. Ed. said, "You drive him towards me and I will kill him with my club". Casmer refused and later told me, "The old fool did not know any better than to hunt that full grown bear with only a club; he really is crazy".

When I talked with Ed, he said, "too bad I didn't have some one with me with nerve; it would have been fun to get that bear". I replied, "I have understood that a bear is an expert boxer. How would you hit him"? "I wouldn't try", he said, "If he sat up in a

From a paper by Harold T. Baldwin of Baldwin Mills to Stanstead Historical Society.

boxing position I would throw a stone or chunk of dirt at him and when he came for me on all fours then I would hit him".

My father heard this and said that old Ed knew what he was talking about. Dad told me that his father had fought bears with only a club for a weapon, and killed them. He remembered when Ed Hill had killed a she bear and two cubs one morning before breakfast. I can imagine no one now living who would, just for the sport of it, fight a death struggle with a bear and have only a club for the job.

Buckland:

Walter Buckland, the fifth child and fourth son of Alexander and Sarah Smith Buckland was born Dec. 12, 1769, married Elizabeth Snow July 11, 1790. They were from Ellington, Conn., and moved to Royalton, Vt., coming to Barnston Corner in 1806. He and his son had come first and built a log house and returned for the family, arriving by ox-cart. The mother and younger children sat in the cart while father and son cut a door for them to enter the house. He was a skilled workman and made hand-made furniture for the early Settlers of Barnston.

William Ashbel Buckland, came to Barnston with his parents in 1806, when he was 2 years old. He married Clarissa Heath. Their second son, Erastus A. Buckland was born Sept. 29th, 1830, making him 19 years old when he joined the California gold rush called "The 49ers". He went by Cape Horn, a rough trip, which he survived. He returned by Panama and brought home several thousand dollars. A big fortune at that time. He married Clara Wilcox, the daughter of Pardon B. Wilcox, one of the founders of the Eastern Townships Bank. They had four children and three are now living. Pardon Bennett, has lived at Ways Mills, now with his son-in-law and daughter, Mr. and Mrs. John McKinnon. Claribel married John Buckland and lives in Coaticook. Miss Mary E. Buckland is now residing at the Heatherington Home.

The Country Lane

SPRINGTIME ON THE FARM

I rise in the morning at four o'clock
 Put on my slippers and my old blue smock.
 No time to primp or powder my nose,
 Not even time to put on hose.
 Go to the woodshed and pick up chips,
 It's good exercise for expanding hips.
 Get some paper and light the fire,
 Toast some bread on a piece of wire.
 Cook the porridge and get the milk —
 Everything is going as fine as silk.
 Feed the hens and mash the chicks,
 Give the old cat a couple of licks.
 Go out to the garden and pull some weeds,
 The peas are not up so put in more seeds.
 Breakfast is over — the day has begun,
 At about this time I'll see the sun.
 Strainers to wash, and cans to scour,
 Something's gone wrong, the milk is all sour.
 Things are in a hubbub — I feel like a wreck,
 Ten cans of milk are BACK from Quebec.
 I haul out the churn and dump in the cream,
 Isn't farm life one long sweet dream?
 The cows are out and start up the track,
 I call the old dog and drive them back.
 Hens are in the garden, scratching out beans,
 There's no time today to dig any greens.
 A few more jobs, then dinner to serve,
 Just about now I'm losing my nerve.
 Wash more dishes and sweep up the floor,
 I hear a rat-tat, there's a tramp at the door.
 Give him some tea and a slice of bread,
 My feet are beginning to feel like lead.
 Friends come from town in a limousine,
 And I know my face is not even clean.
 I dust off a chair, and set it straight,
 And make excuses because I'm late.
 They walk around the garden and look at the land,
 My, isn't a farmers' life just grand!
 I try to grin but it cracks my face,
 Say! Isn't this just a beautiful place?
 You can sit on the lawn and look at the view,
 It's just too bad how I envy you!
 They drive away with a lingering glance,
 Thanking their stars they are not in my pants.
 I see the pig is out of her pen,
 I keep her from eating a broody hen.
 Some agents arrive to fill in the time,
 One wants to sell a car load of lime.
 He knows we are running the farm at a loss,
 And he thinks he had better see the boss.
 One carries a wonderful powder base,
 That will wipe the wrinkles right off my face.
 He really hates to cause me alarm,
 But he fears I am losing my youthful charm.
 I get some supper and water the flowers,
 There is work to do for a few more hours.
 There is no chance to flirt and I should be glad,
 That I have no time to be very bad.
 I crawl into bed at half past eight,
 It's very naughty to sit up late.
 A few hours sleep, then I hear the alarm,
 I'm enjoying a "holiday" down on the farm!

Lillian PIERCE, Melbourne.



MAYFLOWERS

'Tis Spring! 'Tis Spring!
 The Mayflower buds is simple beauty bring
 Home to the heart the first glad thoughts of spring;
 Gently reposing on its mossy bed,
 In modest loveliness it rears its head,
 And yields its fragrance to the wanton air,
 That lifts its leaves to rest and revel there.

— Joseph HOWE

LAMENT OF A YOUNG LADY

Whenever I'm dressed
 In my Sunday best
 I seem to meet no one I know;
 But when I scurry
 Out in a hurry
 Unkind Fate deals a cruel blow:
 My hairdo will fly,
 My seams go awry,
 The hem of my white slip will show.
 I could not look worse —
 So ends this sad verse —
 I'll THEN meet my favourite beau!

Olive Sanborn RUBENS
 Montreal

GIVE THEM NOW!

I'd rather have one small rose now
 From the garden of my friend,
 Then to have the choicest flowers
 When my stay on earth must end.

I'd rather have the kindest words
 Which now you say of me
 Then to be flattered when I'm gone
 And life has ceased to be.

I'd rather have a loving smile
 From friends I know are true,
 Than tears shed o'er my casket when
 I've bidden this world adieu.

— R. D. RICHARDS

True politeness is perfect ease and freedom. It simply consists in treating others just as you love to be treated yourself.

— CHESTERFIELD

Half The World Is Underfed Now

Since the beginning of time hunger has been the greatest motivator of the human race, and as long as hunger exists war will be an ever present spectre. Those who work that others may have freedom from hunger, work for peace.

Canadians may well be proud of the part our country has played in helping to establish the Food and Agriculture Organization of the United Nations and in contributing to the work of the Organization. In July 1960, it launched the Freedom from Hunger Campaign which is aimed at increasing public support for the work of educational and technical assistance to developing countries, so that they may be helped to make better use of their own material and human resources to fight hunger, malnutrition and poverty.

In Canada, a Committee has been formed to support this Campaign. The projects to be undertaken were discussed recently at a Seminar in Toronto and some of these are listed for your information as an example of ways in which groups and individuals are responding to this challenge:

1. The churches of Canada are raising funds to provide for the installation, care, and instruction re use, of outboard motors (donated by a large American corporation) on primitive fishing boats to improve the fishing catch; the project has begun in Togoland and will extend farther as funds provide.
2. The Junior Red Cross in Canada is in the process of raising a large sum to pay the cost of developing school garden and nutrition projects in the Sudan and Sierre Leone. To the latter territory a Canadian graduate, Jean Steckle, is assigned by F.A.O. Dr. Helen Abell is currently surveying the needs of rural families in Northern Nigeria where experienced staff will be placed, it is expected.
3. The 400 Farm Radio Forums in Canada are undertaking to furnish hundreds of radio receivers in India villages through which valuable educational programs will be relayed.
4. A Food Technology Training Centre, Mysore, India, will be operated to provide technical trainees for work in Asia and the Far East. The trainees may be young men or women who will be equipped to help with methods

By Prof. HELEN NEILSON
School of Household Science



to prevent spoilage or destruction of food crops (often as high as 15 to 30 per cent less), to promote proper methods of food preservation such as drying, food storage, food preparation and use. Home Economists and nutritionists should find this an appropriate project on which to focus.

5. A community Development Training Centre at Rungemba, Tanganyika. Tanganyika seems to be progressing to independence, since December 1961, in an orderly and democratic manner but urgently requires trained leaders for the promotion of programs in food and nutrition, development of good home and child care practices, etc. The work is beginning and will require approximately \$18,000.00 yearly to run during the next five years. After this period it is assumed that annual costs would be covered from sources within Tanganyika. Similar Community Development Training Centres may be started in other developing countries in the near future. These are projects of particular interest to home economists and nutritionists.
6. Other projects presently being supported include the following: providing better seed through the purchase of UNESCO coupons

Increase in World Population

A. D.		
1600	300 - 400 million (estimated)	
Interval 200 years		
1800	600 - 800 million (estimated)	
Interval 100 years		
1900	1,500 million	
Interval 60 years		
1960	3,000 million	
Interval 35 years		
1995	6,000 million (estimated)	

(from U.N. Assoc. in Canada, Toronto); raising funds for scholarships for study in co-operative management, in home economics, food and nutrition, agriculture (e.g., Federated Women's Institutes of Canada); providing money for demonstration in the use of fertilizer for soil improvement; providing better plows and tools for farming, and gear for fishing.

7. A unique scheme already successful, *Share-A-Loaf*, was inaugurated by the Toronto Branch of the Women's International League for Peace and Freedom. By this method slotted cards are filled with 25 cent pieces to the value of \$5.00 per card. The Toronto women have had a big response to their drive for funds, with assistance in collection through the Canadian chartered banks. The C.F.F.H. Committee now plans to print these Share-A-Loaf cards and sell them across Canada to co-operating organizations. On each card will be a space for the interested group to stamp or print its name and address, thereby aiding the banks in correctly designating the source of the funds donated.

Current levels of calorie supplies and calorie requirements by regions.

(per caput per day at retail level)

REGIONS	Calorie Supplies	Calorie Requirements
Far East	2,050	2,300
Near East	2,450	2,400
Africa	2,350	2,400
Latin America	2,450	2,400
Europe	3,000	2,600
North America	3,100	2,600
Oceania	3,250	2,600
World	2,400	2,400

Note the gap between calorie supplies and requirements for the Far East and Africa. Also, uneven distribution of food within other countries means that a portion of the population of these countries is underfed.



The Better Impulse

NEWS AND VIEWS OF THE WOMEN'S INSTITUTES OF QUEBEC



Mrs. Norman MacGeorge shown with the quilt, "Grandmother's Flower Garden", which she won in a drawing by the Jerusalem Bethany W. I. It was pieced by the late Mrs. Albert D. Steward and donated by her daughter, Mrs. K. Bradford.

FROM THE OFFICE

Does anyone want any more literature on "Save the Children" work? Or Toronto Exhibition catalogs? We still have a few at the office of each.

ACWW pins may be ordered from Mrs. V. R. Beattie, Richmond, at 50c apiece.

We still have Hasti-Notes, QWI seals and Jubilee dishes. The technician will take a supply to county meetings if you wish to buy them.

Schedule of County Visits: Mrs. Ellard will visit Shefford May 15, Missisquoi May 16, Argenteuil May 12, Brome May 17. Mrs. Harvey — Pontiac May 2, Gatineau May 3, Papineau May 5, Gaspe May 30, Bonaventure June 2. Mrs. Ossington — Rouville May 8, Stanstead May 9, Sherbrooke May 10, Compton May 11, Richmond May 12. Mrs. McGibbon — Vaudreuil and Jacques-Cartier May 3, Chat-Huntingdon May 4, Quebec May 15, Megantic May 16, Montcalm May 18. Dates for Temiskaming and Abitibi are not yet settled.

Farm Day at the College will be held this year June 26. As this is at the same time as our Convention we are urging the delegates to come Tuesday morning so as to be able to take this in. There will be programs all day for the women, tours and demonstrations

FARMING CAN BE HAZARDOUS

Estelle COATES,
Provincial Convenor of
Agriculture, Q.W.I.

ily around the farm. Don't use makeshift ladders, make sure rungs are tight and strong — it may save you a broken leg. Repairing worn boards and steps may take time but will be well worth the effort. Keep poisonous chemicals and animal medicines where they belong — under lock and key. Check electrical wiring every three to five years.

A 250-watt heat lamp will ignite straw — heat lamps should never be less than 12 inches from the litter. Light bulbs should have dust free globes and be placed away from inflammable materials. Keep chutes closed, otherwise in case of fire they act as chimneys. Open chutes are also the cause of falls resulting in broken limbs. Check the barn roof for leaks over hay mows. The moisture could cause heating and spontaneous combustion might occur. Never store motor driven implements in the barn. One spark in dry hay can start a fire. Many insurance companies refuse to accept responsibility for fires started by gasoline motors in barns.

Always treat a bull, even a quiet one, with respect. Check the ground conductors on your lightning rods. Keep buildings and yards neat and free from rubbish and old lumber, inside and out, at all times. Never use gasoline, kerosene, motor oil or grease near a heating unit or welding tool and do not smoke while using them. Destroy oily rags when finished with them. They can also ignite spontaneously.

Field Is Dangerous Too

The runner-up for dangerous spots is the field. This is where you can take a chance without anyone knowing about it. You know better, but you want to get the job done. Figures show that if you're not careful, you may not get it done at all. Machinery plus carelessness equals death. Most of our accidents in the field are

"Accidents don't happen — they are caused!" applies to the farm as much as to any other place. Farmers have a higher accident rate than most industrial workers.

But what causes accidents? Why do they happen? When? Where? How? And who is affected?

It is only when these questions are answered that the causes of accidents can be defined. Once the cause of an accident is known, the method of prevention is much easier to determine.

During the past decade Quebec's agricultural industry has witnessed an unprecedented trend toward mechanization. While mechanical aids have lightened many farm tasks and have improved our way of living, there is abundant indication that too high a price is being paid in human life and injury. An ever-increasing loss of life and injury reveals an appalling story of death, hurt and economic loss.

The fact that farm accidents take a grave toll — in human life as well as in money — more than justifies deep concern and a sense of individual responsibility in making a real effort to deal with this problem.

Farmyard and Buildings MOST DANGEROUS

The farmyard and buildings are the most dangerous places. These are where the farmer spends a lot of his working time and where he feels the most relaxed and the least watchful. He becomes so familiar with his own surroundings he fails to realize the lurking hazards.

Here are some tips to draw your attention to certain factors that could endanger you and your fam-

for the men. Booths will be set up in the rink showing something of the work of the College, both in teaching and research. Free barbecue dinner will be served at noon. Do plan to come with your family for the day. You will be getting a letter telling you more about it.

caused by carelessness and/or fatigue.

Open power take-off shafts, especially among the older types of machinery, unshielded belts, along with loose clothing worn by the operator, constitute big hazards in the field. Young children driving tractors, extra riders on the tractor, excessive speed and faulty equipment cause innumerable accidents yearly.

Fatigue from operating power machinery on the farm is something new that has developed in recent years. The farmer, in his haste to beat the elements, often pushes himself beyond endurance. This is the very time when accidents occur. A short break every two hours would lessen the tension and relax the operator, making him more alert to dangers.

Every year finds more farmers involved in highway accidents, with slow-moving machinery being towed along our over-crowded highways. It has been agreed that suitable lighting front and rear, on all tractors, as well as mounted flashing lights on all trailing machinery and wagons, would greatly reduce these hazards. Reflective tape on these vehicles is also helpful.

Surprising but true — only about 5 per cent of all accidents can be attributed to acts of God, including lightning, ice, snow, fog and wind. The only person who can do anything about farm accidents is the farmer himself. The farmer is his own boss — makes his own safety rules. He is the

plant safety engineer for himself and his family. He must make the safety rules and ensure they are obeyed.

It is hoped that the grave total of accidents and fatalities, plus the high amount of property damage, will make every farm person aware of the increasing hazards of farm life in Quebec.

Half the World (from page 115)

The members of the Canadian Committee for the Freedom from Hunger Campaign are:

Mr. G. H. McIvor, Montreal, Chairman
Mr. John B. Lanctot, Montreal, Vice-Chairman
Dr. Margaret S. McCready, Guelph

Mme Jeanne Sauve, Montreal
Dr. H. H. Hannam, Ottawa
Mr. Mitchell Sharp, Toronto (Chairman, 1961)
Mr. Page Wadsworth, Toronto, Treasurer
Executive Secretary — Dr. H. L. Trueman, Box 2034, Station D, Ottawa, Canada.

Today many people are interested in positive action for peace. The inscription over the Memorial Doors leading to the Library at Macdonald College reads as follows: "You who pass this way, hold in memory and honour those who dared and those who gave their lives that we might continue here the work of peace". Truly, support for the Freedom from Hunger Campaign is a work of peace and worthy of our attention.



Members of Fordyce W. I. displaying the "umbrella" quilt which they have completed for Mrs. Wilder Penfield of Montreal. Left to right: Mrs. G. A. David, Mrs. M. Mason, Miss G. Jones, Mrs. M. Lewis, County president; Mrs. Earle Dryden, Mrs. Geo. Hooper, Mrs. A. Dryden, president of Fordyce; Mrs. G. Bromby and Mrs. J. C. Longeway.

The Month With The W.I.

THIS seems to be the month for new members, always welcome news. The technicians are going to be busy, according to the many reports received referring to courses. Pennies for Friendship are mentioned frequently, as well as Easter Seals and the Red Cross.

ARGENTEUIL:

Arundel gave much thought to a paper read by their Citizenship convener, Mrs. L. Gibbons — "Is too much being asked of the W.I.?" — Do we have to contribute to every organization soliciting funds? When, who and why can we tactfully refuse. It was resolved to give assistance to Educational and Health needs in the community, and to Home Ec. and school scholarships, but not out of the W.I. Treasury. Money would be raised by members' contributions and door to door canvasses. Brownsburg enjoyed a demonstration by Mrs. Oliver from the Canadian Celanese Company. Cookies were sent to the Queen Mary Veterans Hospital for St. Patrick's Day, and a W.I. pin given to a member who has gone on a visit to her homeland, Holland. The executive performed a skit — "How to Conduct a W.I. Meet-

ing" which was enjoyed by the members and by Mrs. S. Doig, County President. Jerusalem-Bethany had two contests, one on flowers and one on fancy breads. Lachute enjoyed a reading given by Mrs. R. Davidson on the History of the W.I., and Pioneer heard about a member's visit to Florida. Hats were made from newspapers. Dalesville brought in empty spools for a Bonaventure project, and sent gifts to a member in hospital. Upper Lachute-East End Mrs. E. W. Smith, Agriculture convener had as her guest Mr. Allan Hammond, who represented Canada at the World Plowing Match in Germany. Mr. Hammond showed slides of his interesting experience.

CHATEAUGUAY-HUNTINGDON:

Aubrey-Riverfield named their favourite flower for roll call, with the rose emerging as the favourite of the majority. A musical quiz was conducted by Mrs. Ewart Orr and a solo was given by Miss Berta Orr. Dundee discussed prejudice and its effects. Members recalled things they admired in immigrants they had met, and pictures of native costumes were shown. Hemmingford enjoyed a visit to T.V. Station CFCF in Montreal. A guided tour of the many

studios was provided. **Howick** concluded a most successful sewing course conducted by Mrs. Wells. Husbands and friends were invited to their meeting when euchre was played after the business meeting. **Huntingdon**'s roll call was "Make us Laugh any way you can" and it produced plenty of chuckles. Each member also gave a three minute impromptu speech and a bring and buy sale was held. **Ormstown** sponsored a Public Speaking Contest with 18 students participating. The judge was Mr. Brash, English Inspector for Protestant Schools in Quebec. A tape recording of the history of this branch was enjoyed. **Franklin** had Mrs. C. Sherrington as guest speaker, her subject being a forthcoming Music Festival.

COMPTON:

Bury had a talk on "Changes in Canadian Industry Since the Turn of the Century" given by their Canadian Industries convener, Mrs. Cathcart. **Brookbury** held a card party with sugar on snow for refreshment. **Cookshire** added to their funds with a "Traveling Basket" project. **Scotstown** renewed their subscription to the C.A.C. A representative of the Bell Telephone Company addressed a meeting sponsored by this branch, his topic being "Wings for Your Words".

GATINEAU:

Eardley gave articles they had made to the U.S.C. **Lower-Eardley** read the Aylmer Fair list and chose the articles they felt they could make best. **Rupert** report that they sponsored a Carnival Queen, Miss Rupert (Julie Gibson) at the Wakefield Carnival. **Lakeview** had Mr. Walter Mobeau as guest speaker. He is Chief of Police in South Hull, and his subject was "Safety Patrol". This is a project of this branch. Books on Safety were given to all schools. Sewing kits were completed for the USC, and a "Bingo" held. **Wakefield** welcomed a new member, and had a collection of used clothing. **Wright**'s roll call was whistle an Irish tune or pay 10c. Reports were also received from **Aylmer East**, **Kazabazua**.

JACQUES CARTIER:

Jacques Cartier: enjoyed a demonstration given by Mrs. Toy on the right and wrong manner of singing a song, stressing that the rendition of same could express the singer's personality. Mrs. Howe, Agriculture convener, reported on the new milk pipe-line installation at the Macdonald Farm, and Mrs. Szczesniak read an item from the C.A.C. Bulletin on the non-inspection of meat.

MEGANTIC:

Inverness brought in empty spools, and decided to buy seeds to be given to the children, for a School Fair. **Kinnear's Mills** have also considered seeds for a School Fair, and they were pleased to welcome the County President as a guest.

MISSISQUOI:

Cowansville received the gift of a gavel from the Stanbridge East branch. Mrs. Sims, president of the C.A.C. was guest speaker, and her topics included meats, stamps and soap. **Dunham** renewed their memberships to the C.A.C. and the Federated News, and discussed the site of the forthcoming W.I. Plaque. **Fordyce** knitted squares to be sent to Greece, and their main project is a cook-book. They subscribed to the "Countrywoman" and sent a donation to the Student Loan Fund. **Stanbridge East** heard a paper on the history of Montreal, comparing the old regime

with the present and the future. Two new members were welcomed, Mrs. Arthur Gage and Mrs. Norman Westover. A dessert tea was held. The W.I. wheel chair is being used by Dunham's Charter member, Mrs. W. S. McElroy.

PAPINEAU:

Lochaber also report a new member. On display were a hand-made dress and a rug which are to be entered in the Tweedsmuir Competition.

PONTIAC:

Bristol were given a very interesting talk on Education by Mr. K. Musgrove, secretary of the Central School Board. **Clarendon** had Mrs. A. Turner, County President, as guest. Home made Valentines such as cookies, pot holders etc. were auctioned. 7 pairs of slippers and a house coat were donated to the Pontiac Hospital. **Fort Coulonge** were entertained with two Irish stories read by Mrs. Ira Whelen, and **Shawville** report an 8 week Bridge Marathon, and a canvass for the Red Cross. **Stark's Corners** stood in memory of Mrs. Harry Hobbs. A Nickel Cake brought in by Mrs. V. Smiley was won by Mrs. M. Wickens. and a reading "Party Line" was given by Mrs. C. Smart.

RICHMOND:

Gore report that Mrs. E. Vogelsanger won a contest for darning a sock. **Cleveland** had a contest on an article made from one yard of material, with prizes won by Mrs. W. Oborne and Miss F. Fletcher. **Melbourne Ridge** surprised Mrs. Sydney Johnston with a rendition of Happy Birthday and a decorated birthday cake. Handicrafts made during the winter were brought in and later sold. **Richmond Hill** had Mrs. V. Beattie, County president as guest, and they answered the roll call in French. **Shipton** have a new member and have held two card parties. **Spooner Pond** celebrated their 25th Anniversary with a banquet. A program of vocal solos, humorous readings, a skit and a reading of the branch history was greatly enjoyed by all present. Life Memberships were presented to Mrs. R. Lampron, the first president of this branch, and to Mrs. B. Rodgers for her years of faithful work in the W.I. Four members of the disbanded Windsor Mills branch have joined **Spooner Pound**. A contest for the best fudge was won by Mrs. W. Parkes.

ROUVILLE:

Abbotsford held a successful food sale and enjoyed a social afternoon.

STANSTEAD:

Ayers Cliff had a guest speaker from the Lennoxville Experimental Farm, Mr. McDougall, who spoke on "Gardening" — Commercial, home, hobby and landscape. **Beebe** entertained the Fish and Game Club for lunch. **Stanstead North** presented a cup and saucer to their retiring president, and Mrs. D. Johnston gave a talk on how school students feel about farm chores and household tasks. **Ways Mills** discussed "Tainted Meats" and sent a request to the government asking for Federal inspection. **Hatley** welcomed two new members. This branch has installed a sink in the school lunch room. A donation was made towards the local school trip to Ottawa.

VAUDREUIL:

Harwood enjoyed a demonstration on Correct Make-Up, and tips on good grooming. A successful tea and food sale was held.

The College Page

OFFICIAL OPENING OF THE LYMAN ENTOMOLOGICAL MUSEUM

The Lyman Entomological Museum was officially opened in its new quarters of the Biology Building of Macdonald College on April 12th, 1962. Mr. George A. Moore, who was secretary of the Lyman Bequest Committee for 47 years, December 1914 to December 1961, unveiled the plaque which officially opened the Museum at a regular meeting of the Montreal Branch of The Entomological Society of Quebec.

The Lyman Collection contains about two hundred thousand specimens of over 25,000 species of insect. Although eclipsed by the National Collection at Ottawa which has over four million specimens, the representation of foreign butterflies and moths in the Lyman Museum surpasses that of the National Collection. In addition, the Museum contains a valuable library of some three thousand books and periodicals on Entomology, some of which are old and very rare.

Among those attending the official opening were two of the heirs of Mr. Lyman, Mr. Francis S. Lyman and Mrs. H. W. Johnston. Mr. V. R. Vickery is curator of the Museum which will be open to students and researchers studying Entomology.

BIGELOW TO UNIVERSITY OF CANTERBURY, N.Z.

Dr. and Mrs. R. S. Bigelow and family leave this month for the University of Canterbury, Christchurch, New Zealand, where Dr. Bigelow has an appointment in the Department of Zoology. Dr. Bigelow, a member of the Department of Entomology at Macdonald, will teach and do research. His first project will be to conduct a faunal survey of the high country in New Zealand.



Mr. Geo. A. Moore, curator of the Lyman Museum for 30 years officially opening the Museum. Plaque is on door to Museum.

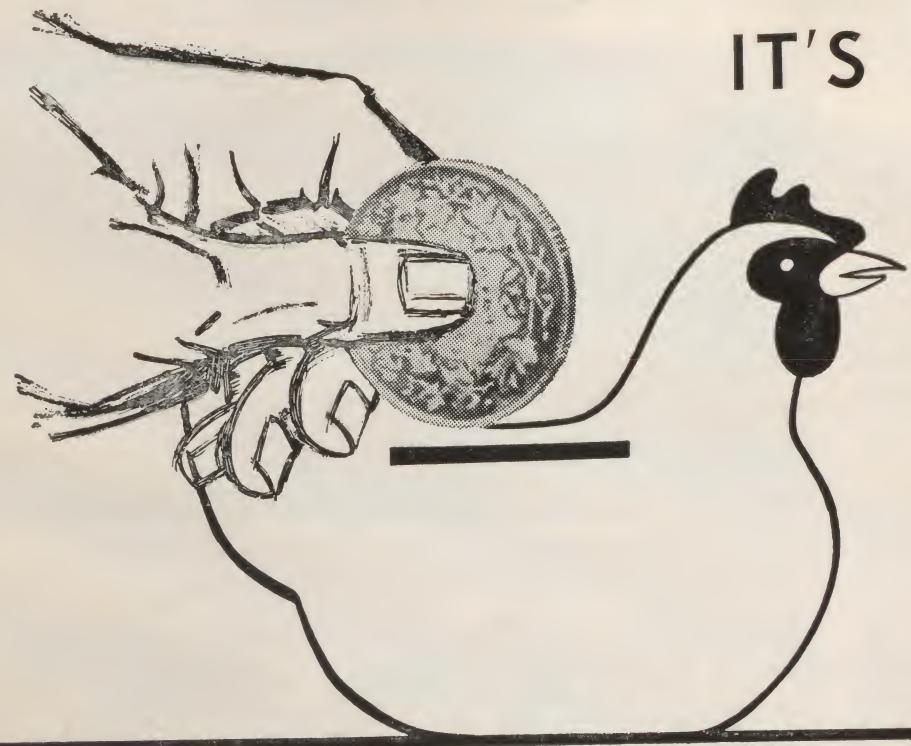


Some of the Lyman insects plus the curator's pipe. Top — left, Beetles; centre inset, Dynastes beetle, South America; centre, 'Stink' bugs, local; right, Wood-boring beetles; Bottom — left, 'Stick' insects, Ceylon; centre, Butterflies, Congo; right, Preying Mantis, local.

FIRST CLASS IN NEMATOLOGY IN CANADA COMPLETED AT MACDONALD

The first class of graduate students studying plant parasitic and free living nematodes (eelworms) in Canada has just completed its course at Macdonald. From left to right — Prof. R. H. Estey; T. Olthof; J. Simard; L. Tartier; G. T. Thomas; D. Marsh; V. Kumar; Miss G. Konar; Prof. D. K. Kevan. Instruction was provided by Prof. R. H. Estey, plant pathologist, and Prof. D. K. Kevan, entomologist, with assistance of Mr. R. Mulvey, Canada Department of Agriculture, Ottawa. Graduates in nematology are in short supply in Canada as attention has only recently been focussed on this division of agricultural science. Nematodes are important to farmers as they feed on roots of plants, which reduces yield, and because they damage the root allowing diseases and viruses to weaken the plant further.





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